

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-102
NPDES NO. CA0038610

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

CITY AND COUNTY OF SAN FRANCISCO, BAYSIDE
WET WEATHER DIVERSION STRUCTURES
SAN FRANCISCO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter the Board) finds that:

1. The City and County of San Francisco, hereinafter called the discharger, submitted a report of waste discharge dated December 21, 1988 for reissuance of NPDES Permit No. CA0038610.
2. The discharger presently discharges untreated domestic and industrial wastewater mixed with storm water runoff, all containing pollutants, into San Francisco Bay, a water of United States through any of fifteen (15) wet weather diversion structures in the North Point Sewerage Zone and twelve (12) wet weather diversion structures in the Southeast Sewerage zone. These discharges occur only when rainfall intensity exceeds 0.02 inches per hour.
3. These diversion structures are described in Table 1.
4. The discharge is presently governed by Waste Discharge Requirements, Order No. 84-28 (NPDES permit No. CA 0038610) which allow discharge into San Francisco Bay.
5. On June 20, 1984 the Board adopted Order 84-29 ordering the discharger to cease and desist from discharging waste contrary to the requirements of Order 84-28. The discharger is threatening to violate the following requirements of Order No. 84-28: Discharge prohibition A.1 (allowable wet weather overflows and overflow criteria). The City has made good progress in completing necessary wastewater projects identified in the Board's 1984 Cease and Desist Order. These include outfall consolidations at North Shore, Channel, and Yosemite-Fitch, as well as Southeast plant wet-weather improvements. On June 15, 1988, the Board adopted Order 88-105, revising Order 84-29 to extend compliance dates for some wastewater transport and storage facilities, including the Sunnydale, Mariposa, and Islais Creek transports. When completed these facilities will provide additional wet-weather treatment and storage capacity, and will reduce the frequency of combined sewer overflows along the remainder of the City's bay shoreline.

6. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved it on May 21, 1987.

7. The beneficial uses of San Francisco Bay and contiguous water bodies are:

- Industrial Service Supply
- Industrial Process Supply
- Navigation
- Water Contact Recreation
- Non-Contact Water Recreation
- Ocean Commercial and Sport Fishing
- Wildlife Habitat
- Preservation of Rare and Endangered Species
- Fish Migration
- Fish Spawning
- Shellfish Harvesting
- Estuarine Habitat

8. In Order NO. 79-67 the Board concluded that:

"Based upon presently available planning information contained in these findings and evidence presented at the public meeting concerning the cost differences of facilities necessary to achieve specific overflow frequencies and the water quality benefits derived from construction of those facilities and considering the location and intensity of existing beneficial uses; a long term average of 4 overflows per year for diversion structures No. 9 through 17, a long term average of 10 overflows per year for diversion structures No. 18 through 35 and an average of 1 overflow per year for diversion structures No. 36 through 43 will provide adequate overall protection of beneficial uses; provided however that further study to comply with discharge prohibitions No. A.2 and A.3 is required by the discharger where existing discharge points are located in confined areas which do not have adequate exchange with bay water and may not provide adequate protection of adjacent nearshore beneficial uses. Further mitigation may be required in the further, after facilities are placed in operation, if it is determined that beneficial uses are not adequately protected."

This conclusion was based on findings 3-17 of Order No. 79-67, and those Findings are included herein by reference.

9. Order No. 79-67 allowed for consideration of an exception to the prohibitions against discharge of waste to deadend sloughs (A.2) and where initial dilution is less than 10:1 (A.3). A report submitted by the discharger to the Board in March 1980 concluded that an inordinate financial burden would be placed upon the discharger relative to the increased protection of beneficial

uses that would be gained by requiring a minimum initial 10:1 dilution of wastes. In addition, an equivalent level of environmental protection can be achieved by alternate means.

10. The exceptions to discharge prohibition cited in findings 8 and 9 are still consistent with the Basin Plan, for the same reasons given above.
11. An Operation and Maintenance Manual is maintained by the discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.
12. This Order serves as an NPDES permit, adoption of which is exempt from the provision of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
13. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
14. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Discharge Prohibitions

1. Discharge of dry-weather waste from the wet weather diversion structures is prohibited.
2. Discharge to waters of the State is prohibited except as defined below. The discharger shall design and construct facilities for diversion structures No. 9-17 to achieve a long term average of 4 overflow per year from these facilities, to design and construct facilities for diversion structures No. 18-35 to achieve a long term average of 10 overflows per year, and to design and construct facilities for diversion

structures No. 36 through 43 to achieve along term average of 1 overflow per year. These long term overflow frequencies shall not be used to determine compliance or noncompliance with the prohibition.

The discharger shall prepare a facilities operation plan which is consistent with the following objectives:

- a. Maximize the volume of wastewater treated (at either the Southeast or North Point treatment plant and discharged via deep water outfalls, consistent with the hydraulic and treatment capacities of the discharger's storage, transport and treatment facilities, and
- b. Assure that all discharges from the diversion structures are first baffled to reduce floatables volume.

The operation plan shall be submitted by October 1, 1989, and will be subject to the Executive Officer's review and approval. The Executive Officer should approve the plan if it (i) adequately implements the above objectives and (ii) provides Regional Board staff with a practical way to assess conformance with the plan itself. Draft additions to the operation plan shall be submitted to the Board at least two months prior to activation of new storage/transport facilities.

After the operation plan has been approved, the discharger's conformance to the operation plan will constitute compliance with this prohibition. Conversely, failure to comply with the plan will consist of non-compliance with this prohibition. Pending plan approval, Regional Board staff should assess conformance with the above objectives to assess compliance. Following plan approval, the discharger may propose amendments, which are also subject to Executive Officer review and approval. The operation plan may be part of the discharger's Operation and Maintenance Manual (see Provisions).

B. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State beyond the immediate vicinity of the diversion structures:
 - a. Bottom deposit or aquatic growths;
 - b. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious

effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result on biological concentration.

C. Provision

1. Order No. 84-28 remains in effect for purpose of enforcement of Cease and Desist Order No. 88-105. For all other purposes, this Order supercedes requirements prescribed by Order No. 84-28.
2. The discharge of pollutants shall not create a nuisance as defined in the California Water Code.
3. The discharger shall comply with all sections of this Order immediately upon adoption.
4. The long term average overflow frequency prescribed in this Order is based on information available at the time of adoption of this Order. If the Board finds that changes in the location, intensity or importance of affected beneficial uses or demonstrated unacceptable adverse impacts as a result of operation of the constructed facilities have occurred they may modify the long-term average overflow frequency. Such action could require the modification of constructed facilities, the modification of the operation of constructed facilities, or the construction of additional facilities.
5. Warning signs shall be posted at sites when water contact recreation is enjoyed by the public whenever there is a discharge from the diversion structures. Such warning signs should be posted on the same days as the overflow unless the overflow occurs after 4:00 pm, in which case the signs should be posted by 8:00 am the next day. The warning signs should remain up until receiving water analyses indicate that Basin Plan objectives for swimming or other watercontact recreation are being met. The current practice of posting signs for the entire wet weather season may continue at beaches adjacent to diversion structures not yet meeting the required overflow frequency, until such time as new facilities are put into service to reduce overflow frequency.
6. The discharger shall review and update his Operations and Maintenance Manual annually, or in the event of significant facility changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Regional Board by July 15 of each year. Documentation of operator input and review shall accompany each annual update.
7. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by

the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by a letter, a copy of which shall be forwarded to this Board.

8. The Discharger shall comply with the attached Self-Monitoring Program. The Executive Officer may make minor amendments to it pursuant to federal regulations (40 CFR 122.63).
9. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements, and Definitions" dated December 1986, with the exception of items A.18, B.2, C.8, C.10(b), C.11, and D.5
10. This Order expires on June 21, 1994. The Discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
11. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on June 21, 1989.



STEVEN R. RITCHIE
Executive Officer

Attachments:

Table 1
Standard Provisions & Reporting
Requirements, December 1986
Self-Monitoring Program
Resolution 74-10

TABLE I

Discharge		Outfall Size Dia. or WXH	Elevation		Discharge Location	Overflows per Year	Control Program	
			Crown (1)	Weir (2)				
9	Baker St.	9'	-8.34	+7.60	Marina Beach	4	NSOC	(3)
10	Pierce St.	7'	+5.00	+7.60	Marina Beach	4	NSOC	(3)
11	Laguna St.	6'	+10.67	+8.70	Marina Beach	4	NSOC	(3)
13	Beach St.	7'X6'	+6.70	+8.10	Pier 39	4	NSOC	(3)
15	Sansome St.	2● 5'6"X6'6"	+7.67	+8.10	Pier 31	4	NSOC	(3)
17	Jackson St.	8'X9'6"	+8.17	+8.20	Pier 3	4	NSOC	(3)
18	Howard St.	7'6"X6'	+6.75	+8.60	Pier 14	10	COC	(4)
19	Brannan St.	7'6"X6'	+5.67	+8.60	Pier 32	10	COC	(4)
22	Third St.	2'6"X3'9"	+4.42	+8.60	Channel St.	10	COC	(4)
23	Fourth St.	6'6"	+7.67	+8.60	Channel St.	10	COC	(4)
24	Fifth St.	9'X7'	+6.67	+8.60	Channel St.	10	COC	(4)
25	Sixth St. (No)	10'X 7'	+6.17	+8.60	Channel St.	10	COC	(4)
26	Division St.	4● 9'6"X8'3"	+12.42	+8.60	Channel St.	10	COC	(4)
27	Sixth St. (So)	3'6"X5'3"	+9.42	+8.60	Channel St.	10	COC	(4)
28	Fourth St. (So)	2'6"X3'5"	+4.42	+8.60	Channel St.	10	COC	(4)
29	Mariposa St.	6'	+8.27	+9.70	Central Basin	43		(5)
30	Twentieth St.	2'	+2.67	N.A.	Central Basin	43		(5)
31	No. 3rd St.	3'6"X5'3"	+5.47	+8.70	Islais Crk.	43		(6)
32	Marin St.	10'X8'	+7.67	+8.70	Islais Crk.	43		(6)
33	Selby St.	3● 10'X7'6"	+9.17	+8.70	Islais Crk.	43		(6)
30A	22nd St.	2'	NA	+8.9	Central Basin	note #4		(7)
35	So. Third St.	4'6"	+3.67	+8.70	Islais Crk.	43		(8)
37	Evans Ave.	6'	+11.40	+9.20	India Basin	43		(8)
38	Hudson St.	2'6"	+12.17	+18.70	India Basin	43		(8)
40	Griffith (So.)	5'6"	+7.22	+9.20	South Basin	1		(9)
41	Yosemite Ave.	9'X7' & 11'X6'	+7.42	N.A.	South Basin	1		(10)
42	Fitch St.	6'9"	+6.38	+8.70	South Basin	1		(10)
43	Sunnydale	6'6"	+6.17	+9.20	Candlestick Cove	43		(11)

Notes

- (1) Elevation in feet above MLLW - Crown of outfall at shoreline.
- (2) Elevation in feet above MLLW - Weir height where overflow occurs from collection system.
- (3) NSOC - Northshore Outfalls Consolidation
- (4) COC - Channel Outfalls Consolidation
- (5) Control planned - Mariposa Transport Storage (Bayside B-7).
- (6) Control planned - Islais Creek Transport Storage (Bayside B-4).
- (7) ICOC - Islais Creek Outfalls Consolidation.
- (8) - Hunter's Point Transport Storage (Bayside B-6).
- (9) Control under construction - Griffith Pump Station (Bayside B-5).
- (10) Control planned - Yosemite-Fitch Outfall (Bayside B-5).
- (11) Control planned - Sunnydale Transport Storage (Bayside B-5).
- (12) Outfall No.'s 1-8 are governed by NPDES Permit No. CA0038415.
- (13) Outfall No.'s 12, 14, 16, 20, 21, 34, 36 and 39 have been abandoned.
- (14) Existing storm drain which will be convert to CSO outfall as part of Mariposa Transport Project.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

CITY AND COUNTY OF SAN FRANCISCO

NORTH POINT AND SOUTHEAST SEWERAGE ZONES

WET WEATHER DIVERSION STRUCTURES

NPDES NO. CA 0038610

ORDER NO. 89-102

CONSISTS OF

PART A, dated December 1986

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. COMBINED SEWER OVERFLOW

<u>Station</u>	<u>Description</u>
O-1	**
O-2	**
O-3	**
O-4	**
O-5	**
O-6	**

** The discharger shall select six representative sampling stations from the existing twenty-nine (29) wet weather diversion structures. The discharger shall submit a detailed proposal to the Executive Officer by September 1, 1989 for approval.

B. SHORELINE STATIONS

S-1	End of Marine Drive-in Golden Gate National Recreational Area
S-2	North of U.S. Coast Guard Station by Marine Drive
S-2a	Crissy Field West
S-2b	Crissy Field Central
S-2c	Crissy Field East
S-3	End of Lyon Street
S-4	Inner Beach West and Yacht Harbor
S-5	Shoreline foot of Pierce St. Outfall pipe
S-6	Shoreline foot of Webster St. N. E. Corner breakwater
S-7	Shoreline Foot Laguna Street., Small Boat Dock

S-8	Alcatraz Pier 50 ft. from shoreline East Side
S-9	Municipal Pier East Side
S-10	Aquatic Park Beach West End
S-11	Aquatic Park Beach East End
S-12	Municipal Pier West Side
S-13	Shoreline Bulkhead Ft. of Leavenworth Street.
S-14	Fisherman's Wharf at Pump Station
S-15	Pierhead, Pier 39
S-16	Pierhead, Pier 33
S-17	Shoreline Bulkhead Between Piers 17 & 19
S-18	Shoreline Bulkhead Between Piers 7 & 9
S-19	Shoreline Bulkhead Pier 1 1/2 center
S-20	Foot of Howard Street
S-21	Bulkhead N. Side Pier 38
S-22	Bulkhead N.E. Corner 3rd St. Bridge
S-23	5th Street North Overflow Structure
S-24	6th Street North Overflow Structure
S-25	7th Street Overflow Structure
S-K	Pier 50 Southwest Section
S-J	Mission Rock public fishing pier
S-I	End of Mariposa Street
S-H	End of 20th Street
S-G	Pier 80 Southeast Corner
S-F	Middle of Islais Creek 3rd Street Drawbridge
S-E	Pier 96

S-D	End of Handson Street
S-C	End of Griffith Street
S-B1	End of Fitch Street
S-B2	End of Yosemite Street
S-A	Candlestick Point SRA fishing pier
S-A1	Candlestick Point SRA windsurfing area west
S-A2	Candlestick Point SRA windsurfing area middle
S-A3	Candlestick Point SRA windsurfing area east

II. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

A. OVERFLOW STATION

Effluent sampling from the stations O-1 to O-6 will be required only during discharge events, which may last from less than an hour to over a day. Composite sampling shall commence with 1 hour after a discharge begins and continue until the discharge ceases, but not to exceed 24 hours. Samples shall be taken according to the following schedule:

<u>Parameter</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Flow (mgd) ⁷	Continuous	Continuous during discharge
BOD (mg/l)	C-X ¹ (X<24)	1/discharge
Suspended Solid	C-X ¹ (X<24)	1/discharge
Ammonia as N	C-X ¹ (X<24)	1/discharge
Oil and Grease ³ (mg/l)	Grab ⁶	1/discharge
pH	Grab ⁶	1/discharge
Trace Metals ⁴	C-X ¹ (X<24)	No more than 1/month
PAH ⁵ (ug/l)	C-x ¹ (X<24)	No more than 1/month

Notes:

1. Composit sample (1/hour) over X hours (the duration of the discharge), not to exceed 24 hours.

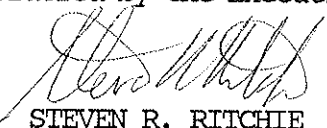
2. One composite sample per discharge event, not to exceed 2 composite samples per month.
3. May use composite sample if Standard Methods used to assure accurate results. Otherwise, use three grab samples taken at two hour intervals with the first taken during the first hour of discharge.
4. Measure concentrations of ten metals: arsenic, cadmium, chromium (hexavalent or total), copper, lead, mercury, nickel, silver, zinc, and cyanide.
5. Polynuclear aromatic hydrocarbons, as identified in EPA Method 610.
6. Grab samples required only during daylight hours.
7. The discharger may use models to estimate flow, given the difficulty of directly measuring flow from diversion structures. Such models should account for all applicable inputs and outputs to the sewer system and should be calibrated at least once every two years for each overflow station.

B. SHORELINE STATIONS

Shoreline stations shall be monitored 1/ week except for the following stations located near water-contact recreation areas: S-1, S-2 (including a-c), S-3, S-4, S-10, S-11, and S-A (including 1-3). The listed stations shall be monitored 4/week. Monitoring shall include (i) sampling and analysis for total coliform bacteria and (ii) standard observations (including presence of foam, floating materials, odors, or other evidence of pollutants, and date, time, and tidal stage).

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-102.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger and revisions will be ordered by the Executive Officer.


STEVEN R. RITCHIE
Executive Officer

Effective Date

6/21/89

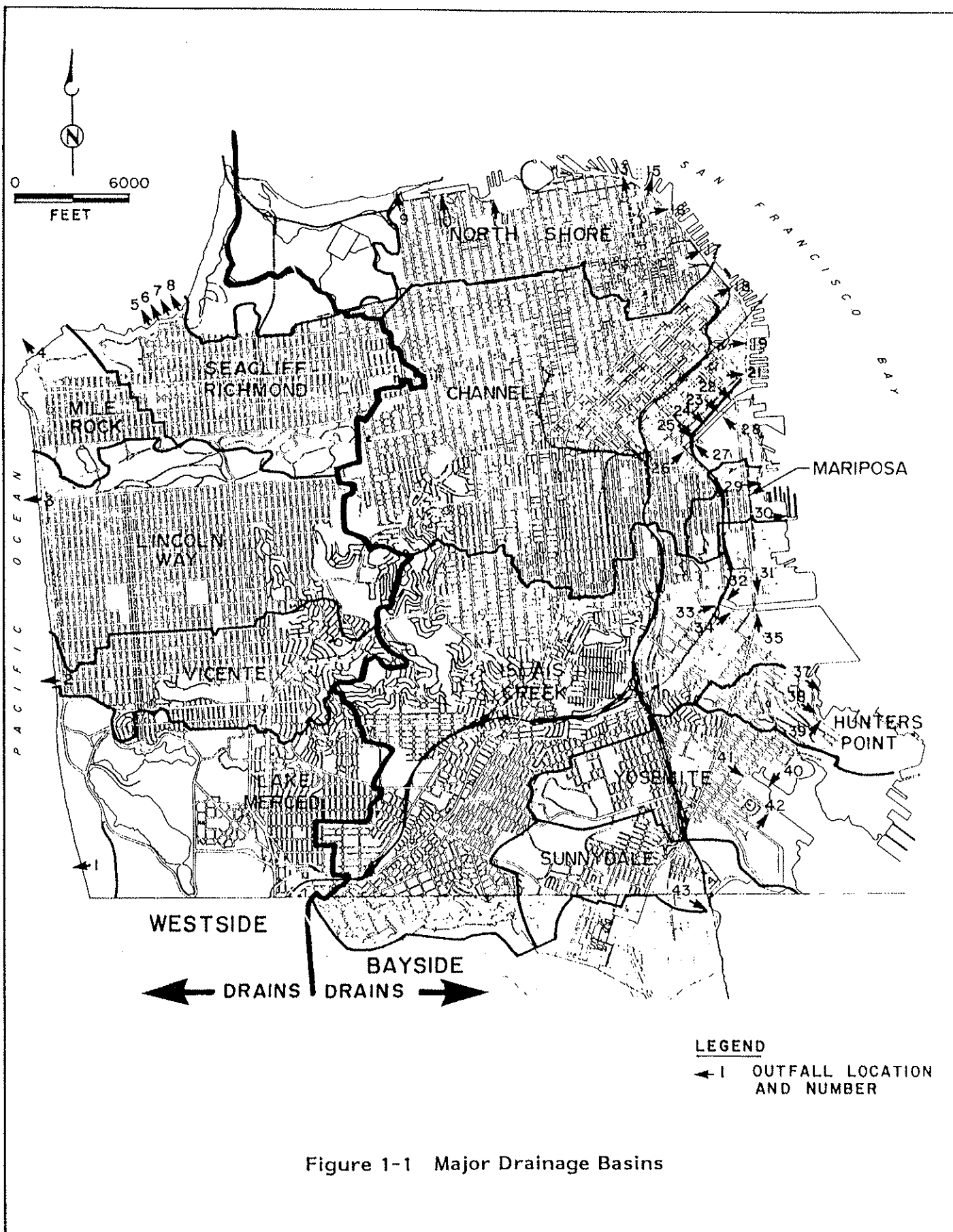


Figure 1-1 Major Drainage Basins